

**2000-2001 GEPA Sample Form
Science
Score Interpretation Guide**

The New Jersey Department of Education is pleased to provide the 2000-2001 GEPA Sample Form as tools for gauging students' achievement on the administration of these tests. Although the sample forms contain previously tested items and are built to specifications similar to the "real" test, they are not the "real" test. As such, these sample forms are not intended to predict student scores on the GEPA. There are several reasons for this:

1. Student performance on this or any test will vary from day to day.
2. The sample form will be given under less standardized conditions than the conditions used for the live tests.
3. The sample forms will be scored locally without the extensive training and accuracy controls used to score the live tests.
4. Continued instruction will occur in the time between the administration of the sample form and the live test.

However, this sample form can be used to screen for students who may have difficulty reaching the Proficient level. Also, by examining questions that a student or group of students (e.g., a classroom) answer incorrectly, teachers can identify possible strengths and weaknesses in specific skills. The scoring key provides links to the *Core Curriculum Content Standards* and the *Directory of Test Specifications and Sample Items* to help you understand the content, skill and process domains that each question represents.

Individual student performance on these sample forms can be interpreted as follows:

Level	Score Range	Indication
1	0 – 30.5	There is a good chance that the student would <u>not</u> score at the Proficient level.
2	31.0 – 35.5	There is a good chance that the student would score just above or just below the Proficient level cut-score.
3	36.0 – 52.0	There is a good chance that the student is at or above the Proficient level.

The New Jersey Department of Education highly recommends that teachers use sample form results as only one piece of information when determining the instructional needs of a student or group of students.

2000-2001 GEPA Sample Form Science Scoring Key

Item #	Correct Answer	Descriptors (Content Cluster, Knowledge Area, Skill)
1	A	Life, Environment, Systems
2	B	Life, Structure of Living Things, Systems
3	C	Physical, Force and Motion, Conceptual Understanding
4	D	Earth, Universe, Systems
5	B	Life, Environment, Systems
6	A	Physical, Properties of Matter, Problem Solving
7	A	Physical, Energy, Systems
8	D	Physical, Energy, Systems
9	D	Earth, Structure of the Earth, Problem Solving
10	C	Physical, Energy, Conceptual Understanding
11	B	Life, Diversity, Systems
12	A	Earth, Structure of the Earth, Problem Solving
13	A	Life, Diversity, Conceptual Understanding
14	D	Physical, Force and Motion, Problem Solving
15	B	Earth, Structure of the Earth, Problem Solving
16	See Rubric	Physical, Properties of Matter, Problem Solving
17	B	Life, Structure of Living Things, Conceptual Understanding
18	B	Earth, Structure of the Earth, Problem Solving
19	B	Physical, Energy, Problem Solving
20	D	Earth, Structure of the Earth, History of Science
21	B	Life, Structure of Living Things, Conceptual Understanding
22	C	Earth, Universe, Systems
23	A	Physical, Energy, Mathematics
24	C	Physical, Force and Motion, Problem Solving
25	C	Physical, Properties of Matter, Technology
26	B	Earth, Universe, Mathematics
27	D	Life, Environment, Systems
28	B	Earth, Universe, Systems
29	D	Life, Structure of Living Things, Systems
30	A	Physical, Atoms, Conceptual Understanding
31	B	Earth, Structure of the Earth, Problem Solving
32	See Rubric	Earth, Structure of the Earth, Systems
33	A	Physical, Force and Motion, Problem Solving
34	C	Life, Environment, Technology
35	B	Earth, Structure of the Earth, Systems
36	D	Physical, Properties of Matter, Problem Solving
37	C	Earth, Universe, Systems
38	C	Life, Environment, Conceptual Understanding
39	B	Physical, Properties of Matter, Problem Solving
40	Omitted	
41	C	Earth, Universe, Conceptual Understanding
42	A	Physical, Properties of Matter, Problem Solving
43	A	Physical, Force and Motion, Problem Solving
44	D	Life, Diversity, Problem Solving
45	A	Physical, Force and Motion, Conceptual Understanding
46	Omitted	
47	D	Life, Environment, Conceptual Understanding
48	See Rubric	Life, Environment, Systems

Scoring Instructions

Official scores for open-ended items on a live test are derived from two independent readings of each student response. If you do not plan to use a second scorer, simply assign the same score twice. *Responses that are unintelligible, not in English, off topic, not responsive, or only a partial fragment are assigned a score of **zero points**.* If you have difficulty deciding on a score point or feel a particular response lies between two score points on the rubric, you may assign “split” scores (i.e., 2 and 3). Based on the item types, the two scores are either added together or averaged (which can result in half-points) in computing the total number of points earned.

To compute the total score, add the following:

- Count one point for each correct answer on multiple-choice items (maximum of 43 points possible)
- Scores of open-ended items 16, 32, and 48 (average of two scores for each item – minimum of 0, maximum of 3 points possible for each item or 9 total maximum points possible)

Total of 52 maximum points possible.

*Refer to the *Directory of Test Specifications and Sample Items for the Grade Eight Proficiency Assessment (GEPA) and High School Proficiency Assessment (HSPA) in Science*, published by the New Jersey Department of Education in February 1998 for further information.

3 points The student:

- states or clearly implies that the lake and the sandstone will increase in temperature
and/or
that the sandstone heats up more rapidly than the lake.
- Explains that the answer is based on the pond/soil chart
or
that soil and water absorb heat from the sun and/or that water absorbs less heat than land.
- Offers at least one valid reason that the prediction might be incorrect.*

(Answer may include minor but not major factual errors.)

1 point The student's response includes one of the three points
or
correct information given is compromised by the quantity of incorrect information.

*Possible valid responses include, but are not limited to

- different bodies of water (depth, size)
- different shore (soil vs. stone)
- time (7:00-12:00 vs. ??)
- possible vegetation
- different exterior temperature
- wind

<u>Code</u>	<u>Reason</u>
NR	No Response
OT	The paper was off-topic.
NE	The paper was in a language other than English.
WF	The paper was written in the wrong format, e.g., the student responded with a poem instead of an essay.
FR	The paper contained only a fragment of a response.

Unscorable student papers receive a score of 0.

GEPA - SECURE MATERIAL - DO NOT COPY

DIRECTIONS FOR QUESTION 16: Respond fully to the open-ended question that follows. Show your work and clearly explain your answer. You may use words, tables, diagrams, or drawings. Write your answer on page 3 of your answer folder.

16. A classmate measures the temperature of pond water and the soil that surrounds it every hour for a period of five hours on a sunny day. The measurements are shown in the chart below.

Time (Hours)	0	1	2	3	4	5
Water Temperature (°C)	16	17	18	19	21	23
Soil Temperature (°C)	16	16	19	21	23	26

The next day, at a nearby lake that has a shore of sandstone, you measure the temperature of the sandstone and water at 7 a.m. You find that both have a temperature of 13° C.

If it is sunny all day:

- What do the results of the experiment at the pond predict about the temperature of the sandstone and the lake water at noon?
- Explain your answer.
- Explain why your prediction, based on the data, might be incorrect.



Item: 16

Score: 0

Sample #: 1

SCIENCE - PART 1

OPEN ENDED RE

16.

- The results of the experiment at the pond predict that about the temperature of the sandstone and the water at noon, that it'll be sunny.

Score Point: 0

405030

86

SCIENCE - PART 1

OPEN-ENDED RES

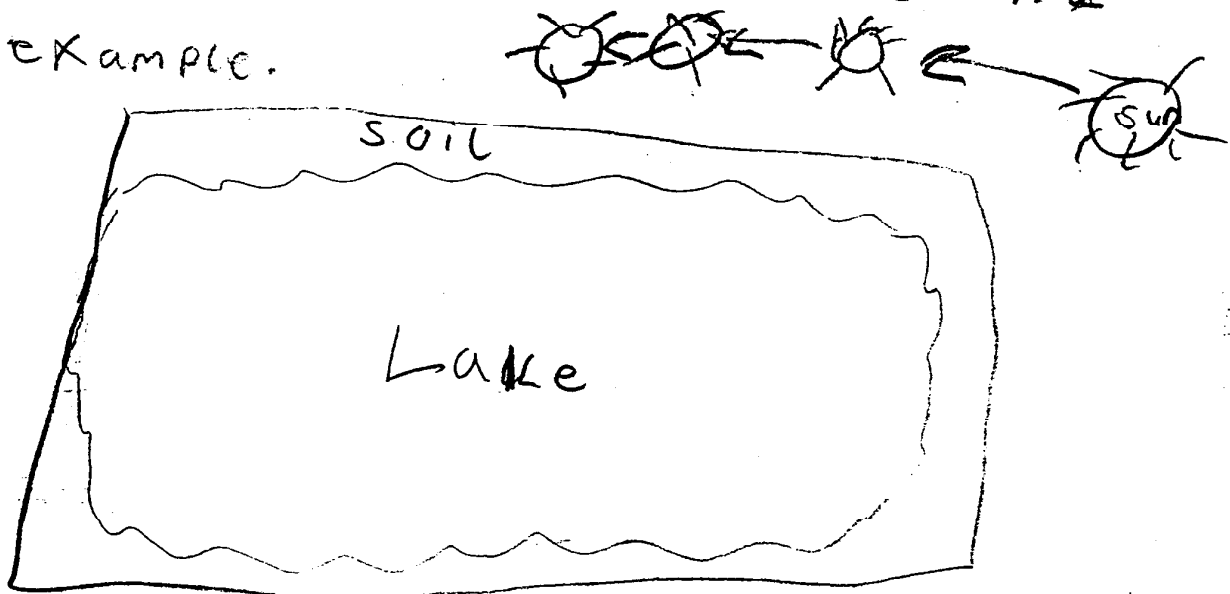
Item: 16

Score: 0

Sample #: 2

16.

I heypredict that as the lake gets warmer the water gets soaked up by the soil and then it heats the soil here is an example.



at noon the sun is at its hottest point and it is directly over the lake so at 7am. it will be cold but 5 hours later it will have gotten warmer. my answer also could be incorrect because if it is winter the sun really isn't out also clouds and storms could affect it.

Score Point: 0

309872

SCIENCE - PART 1

Item: 16

Score: 0

Sample #: 3

OPEN-ENDED RES

16.

I think the results from the experiment would be 20°C . I feel this way because it is a sunny day and on sunny days things tend to expand in temperature. Based on the data, my prediction might be incorrect because.

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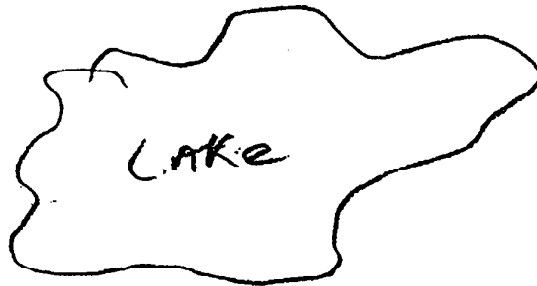
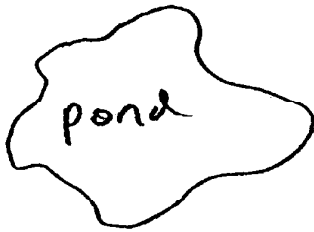
420361

SCIENCE PART 1
OPEN-ENDED RE

Item: 16
 Score: 1
 Sample #: 1

16.

The results show that because the pond is smaller, it doesn't take as long to warm up.



The lake has more area, + takes more heat to warm it up.

The soil of the pond is more dense than the sandstone. It will absorb more heat. The sandstone will not absorb as much heat because the heat will probably pass through it.

My prediction may be incorrect because the person who measured the pond could have gone there later in the day when the sun had been up for a while.

01 0002--000052

00032-71

PLEASE DO NOT WRITE IN THIS AREA

309603

Item: 16

Score: 1

Sample #: 2

SCIENCE PART I

OPENENDED

16.

The results of the temperatures are that the sand
warms faster than the water.

Score Point: 1

105275

Item: 16

Score: 1

Sample #: 3

SCIENCE PART I
OPEN-ENDED RES

16.

- The experiment shows that the soil heats quicker than the water does when the time reaches noon.
- I got my answer by comparing the temperature. I noticed that when the closer it got to noon the soil temperature was greater than the water.
- Even if the data was incorrect I predict that the soil will still be warmer because it is a solid and can trap heat. On the other hand the water is liquid and can not hold the heat very well. My answer might also be incorrect because it depends what time of the year it is.

SCIENCE PART 1

OPEN-ENDED RES

Item: 16

Score: 2

Sample #: 1

16.

- I predict that the temperature of the sandstone will be greater than the water because the sun light heats the rock faster than the water because the sun has to heat all the water and the rock are small than the water. If the water is deep the sun does not go down to the bottom of the water and does not heat as fast. The rock is smaller and might heat fast. I might be incorrect because sandstone if heated to much it will blow up I know that because it happen to me. So sandstone might not conduct heat as much.

SCIENCE - PART 1

Item: 16

Score: 2

Sample #: 2

OPEN-ENDED RES

16.

If the temperature is 13°C at 7am, on a sunny day the next day, by noon the water and soil temperature will increase. The water temperature may be 20°C and the soil temperature may be 23°C .

I think the water temperature may be 20°C because the graph shows in 1 hour the temperature increases by 1°C then the 2nd hour by 1°C , the 3rd hour by 1°C , the 4th hour by 2°C , and the 5th hour by 2°C . When you follow the same procedure you get 20°C .

I think the soil temperature may be 23°C because I followed the procedure.

Score Point: 2

104539

19

SCIENCE - PART 1

Item: 16

Score: 2

Sample #: 3

OPEN-ENDED RESPONSE

16. The results at the experiment at the pond predicts the temperature at the lake at noon will be 20°C . I got this # because at the pond in the beginning the temperature was 16°C it increased 7° in 5 hours. The temperature at the lake was 13°C and it may increase 7° to 20°C over 5 hours. My prediction may be wrong because the pond data may not have been taken at 7:00 am which means the sun may have rose at a different speed. I may also be wrong because the pond is surrounded by soil and the lake is surrounded by sediment. The two materials may have different effects on the water. The last reason I have that I may be wrong is maybe that either the lake or the pond may get more sunlight. One may be blocked off by the sun by trees.

PLEASE DO NOT WRITE IN THIS AREA

63

SCIENCE PART 1

OPEN-ENDED RES

Item: 16

Score: 3

Sample #: 1

16. The results of the experiment at the pond predict that the temperature of the sandstone and the lake water at noon will be around 23°C . I think this way because the pond water and soil temperature both almost increased 10°C for a period of 5 hours on a sunny day. Most likely it will increase because that's what happened to the pond. Also after 5 hours on a sunny day, the temp. usually goes up by noon.

Based on the data given, my prediction could also be incorrect. First, the first data is at a pond and the next day at a lake. It's different water. Second, the temperature may not be as warm or sunny as the day before and only go up 4°C or 5°C .

Score Point: 3

497915

58

SCIENCE PART 1
OPEN-ENDED RE

Item: 16

Score: 3

Sample #: 2

16. The results of the experiment at the pond predict that the temperature of the sandstone and the lake water will increase at noon. In the chart above the temperature of the water + soil increased each hour, so at a nearby lake it should do the same. My prediction could be incorrect because the sandstone could hold a different temperature than the lake water and could start to decrease. Because we are testing two different variables sandstone and soil, my predictions can be incorrect.

Score Point: 3

420959

SCIENCE - PART 1

Item: 16

Score: 3

Sample #: 3

OPEN-ENDED RE

16.

The results of the experiment at the pond predict that temperature of the water will be 23°C and the sandstone^{on} will be 26°C at noon. This is because the same experiment, done the day before, revealed these ~~same~~ results, and if both days have the same^{weather,} the^{on both days} temperatures should be equal^{as} well. My prediction could be incorrect because on day 2, the temperature of sandstone is being calculated, not soil. Also, the size of the lake could differ from the size of the pond, causing one to warm more rapidly than the other.

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121069

**2000 GEPA FIELD TEST
SCIENCE
Item 32
Water Cycle
Rubric – Revised 06/00**

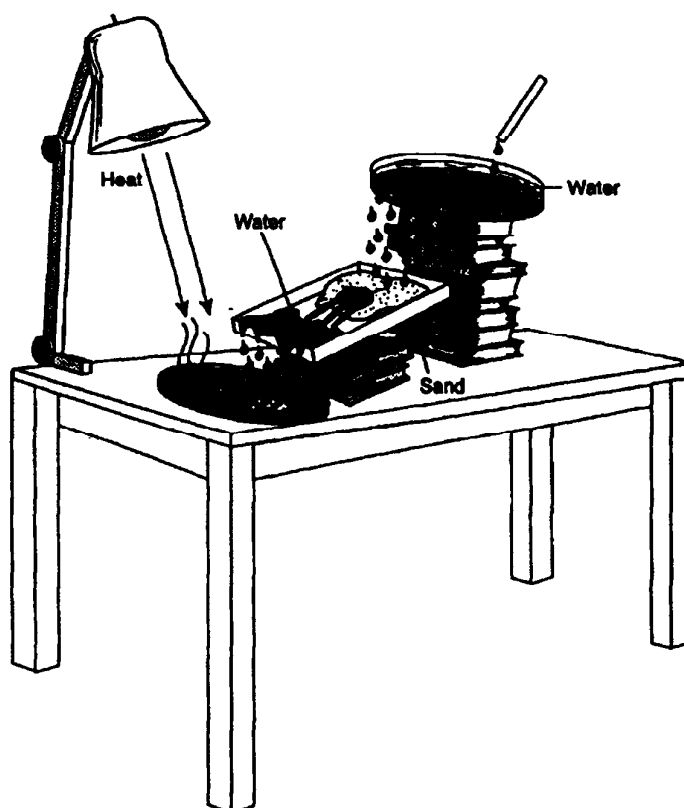
Sample Response

The step that is left out is condensation. This is the process by which water vapor (or evaporated water) condenses and becomes water (or solid) again. Without condensation water would have no way of returning to the ground after evaporating.

- | | |
|-----------------|--|
| 3 Points | Student successfully completes the task by identifying condensation as the missing step, and by describing that condensation is the process by which water vapor (or gas, or air) condenses and becomes water again. Also explains that without condensation water would have no way to return to earth after it evaporates. Must contain the work condensation. |
| 2 Points | Student adequately completes the task by identifying the missing process with or without the term condensation, and by describing that condensation is the process by which water vapor (or gas, or air) condenses and becomes water again or identifies condensation and explains water would have no way to return to earth after it evaporates. Identifies the missing process with or without the term condensation. |
| 1 Point | Student completes the task by identifying condensation as the missing step or gives a partial explanation that does not complete the process and does not identify the process. All other explanations are unclear or inappropriate. |
| 0 Points | Attempts the task, but the response is incorrect, irrelevant, or inappropriate. |



DIRECTIONS FOR QUESTION 32: Respond fully to the open-ended question that follows. Show your work and clearly explain your answer. You may use words, tables, diagrams, or drawings. Write your answer on page 15 of your answer folder.



The above apparatus models the workings of the water cycle, but one step in the cycle is left out.

- Identify the missing step.
- Describe what happens during that step in the water cycle.
- Explain why the cycle would cease to exist if this step were left out in real life.



SCIENCE - PART 4

OPEN-ENDED

Item: 32

Score: 0

Sample #: 1

64. The water has to go back up
and has to have some
other place to fall. The water
goes back down. We would
all drown because, of all
the water on Earth.

00 0170-000003

04743-75

PLEASE DO NOT WRITE IN THIS AREA



235270

L 6

SCIENCE - PART 4

Item: 32

Score: 0

Sample #: 2

OPEN-ENDED

64.

- The missing step is when the water evaporates after the water goes into the pan.

- The water would convert from a liquid into water vapor.

- If the water didn't evaporate back into a gas, then the cycle could never recycle & begin again in the first place.

01 0175-000015

00423-75

PLEASE DO NOT WRITE IN THIS AREA



219833

L 22

SCIENCE - PART 4

Item: 32

Score: 0

Sample #: 3

OPEN-ENDED

64.

In the step of the water cycle when you pour the water on to the pan and put it in heat the water will evaporate. When you put water in the heat it is going to disappear because the heat dries it up.

I think the step that is left out is the temperature. Without the temperature they are not going to find out the temperature of the heat.

PLEASE DO NOT WRITE IN THIS AREA



233762

L 27

SCIENCE - PART 4

OPEN-ENDED F

Item: 32
Score: 1
Sample #: 1

64.

The step that's missing is the step
when the evaporated water turns
turns to driplets to form a Cloud.

01 02133-000357

03837-75

PLEASE DO NOT WRITE IN THIS AREA



234152

L5

SCIENCE - PART 4

Item: 32

Score: 1

Sample #: 2

OPEN-ENDED

64. The step that is missing is ~~the~~ condensation

During the erosion the sand and water would mix.

In real life it would just be water. When in fact it is both.

01 0141-0001

04029-75

PLEASE DO NOT WRITE IN THIS AREA



227121

L 14

SCIENCE - PART 4

Item: 32

Score: 1

Sample #: 3

OPEN-ENDED RE

64.

The miss step is taking the water that was evaporated back and using it again.

① The straw has water fall, like a rain storm into a pan.

② The pan has holes in it which drops the "rain droplets" into a sheet pan.

③ The sheet pan, which is on a slant, has sand under where the water falls so when the water slides down it will bring some sand with it.

④ Then the water falls into a round pan which is directly under a light.

⑤ The light sends heat to the round pan which will evaporate the water.

⑥ The procedure will repeat over and over.

The water would not go through the straw and they would have to find another way for water. Which would defeat the whole purpose of the experiment.

PLEASE DO NOT WRITE IN THIS AREA



226693

1 30

SCIENCE - PART 4

Item: 32

Score: 2

Sample #: 1

OPEN-ENDED

64. the missing step is the making clouds
the water evaporates and forms a cloud when
the cloud gets big enough it starts to
rain. you could not have rain without
clouds so there would be no rain. where
would the evaporated water go if
it did not have to make a cloud?

01 0145-00013

00433-75

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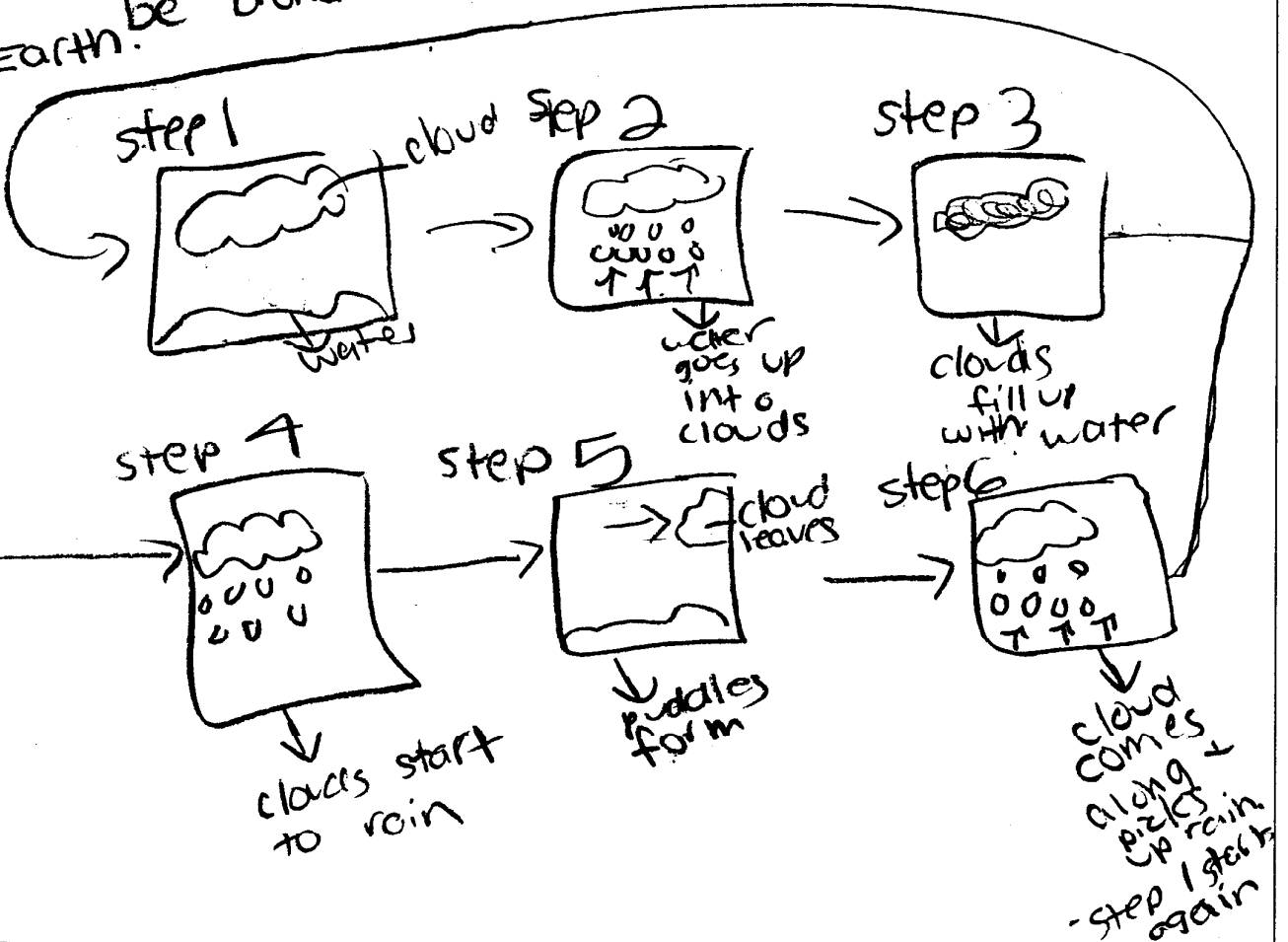
236492

L 2

SCIENCE – PART 4

OPEN-ENDED RESPONSE

64. The missing step in the model of how the water cycle works is when the clouds disperse the water that evaporated into the clouds. The cycle would cease to exist if this step was missing. This is because first the rain is picked up from a cloud. Then the rain falls to the earth. Next, the rain gradually collects and is evaporated into the clouds again. Without the last step, the cycle would be broken and the water would just stay on Earth.



PLEASE DO NOT WRITE IN THIS AREA



226890

L 4

Item: 32

Score: 2

Sample #: 3

SCIENCE - PART 4

OPEN-ENDED RE

64. The missing step is condensation.

This occurs when a lake gets hot and evaporates into the air. When it's in the air clouds absorb the evaporated water making the cloud heavier. When the cloud gets too heavy it lets the water out known as precipitation.

If this step wouldn't occur, there would be no rain.

01 0175-000013

00423-75

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219882

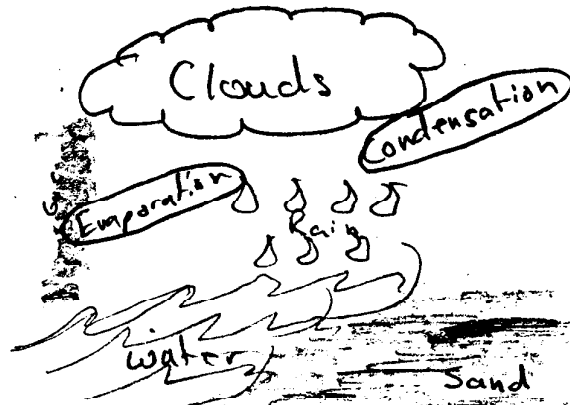
L 23

SCIENCE - PART 4

OPEN-ENDED

64. The step of condensation is missing in this step evaporated water comes together forming clouds causing it to rain with out this step water could not fully circulate. The water would go up in the air never come back and gradually water would no longer exist on earth.

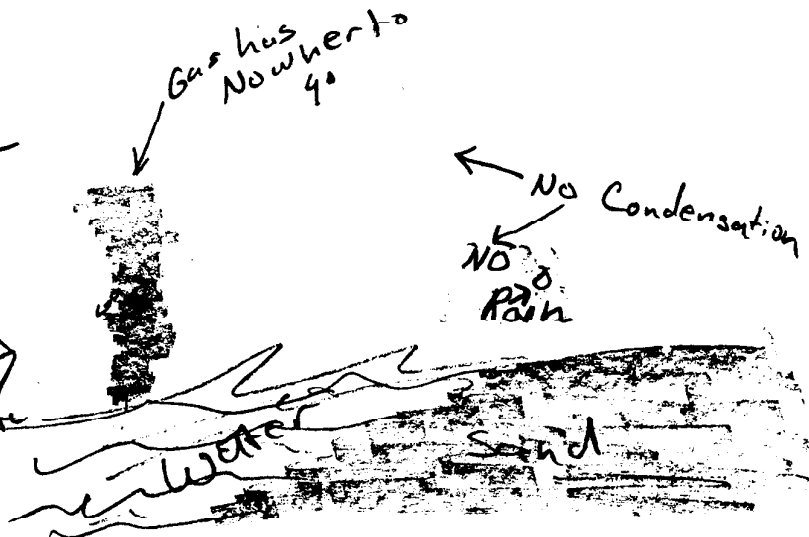
with condensation
SUN



without
Condensation



Water continues to evaporate



PLEASE DO NOT WRITE IN THIS AREA



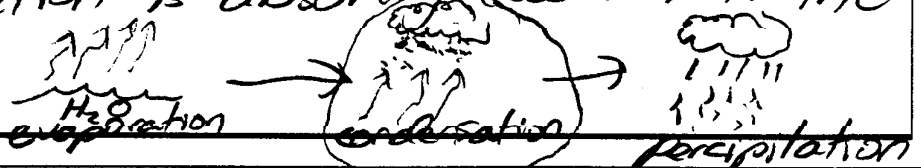
226408

SCIENCE – PART 4

OPEN-ENDED

64. The step that is missing in the model of the water cycle, is condensation. This is a crucial step, when evaporated water condenses in the atmosphere into clouds, and eventually into precipitation. This occurs when the moist evaporated water rises up. When it meets with the cold air in the upper atmosphere, it cools and condenses into small droplets. If then condenses further to the point, it drops to the Earth as precipitation ^{where}.

If this step were left out, the water cycle would cease to exist. This is true because, if water continued to evaporate and never condense, then water would never return to the Earth. As a result, we would lose all the water, since it would never precipitate. This will cause all living organisms to die out, since we all need water for survival. That is why condensation is absolutely essential to the water cycle.



PLEASE DO NOT WRITE IN THIS AREA



227243

L 10

Item: 32

Sample #: 3

OPEN-ENDED RES

01 0141-00022

04029

PLEASE DO NOT WRITE IN THIS AREA

227072

**2000 GEPA SCIENCE
ITEM 48
RUBRIC
RABBIT/GRASS POPULATIONS**

- 3 points** The student makes predictions about both rabbit and plant populations at six months and five years with reasonable explanations. The answer must include the rabbit population response to the lack of food at five years; e.g., lower population of rabbits, migration, or death.
- 2 points** The student makes reasonable predictions about both time frames with at least an implied explanation for one time.
- OR
- The student may have grasped all the elements of the answer but has failed to express or connect them clearly.
- 1 point** The student makes a prediction or explanation of the population(s) for only one time frame.
- 0 point** The response is incorrect, irrelevant, or inappropriate

DIRECTIONS FOR QUESTION 48: Respond fully to the open-ended question that follows. Show your work and clearly explain your answer. You may use words, tables, diagrams, or drawings. Write your answer on page 11 of your answer folder.



The only predator of the rabbit population in a meadow ecosystem has been removed.

- Predict what will happen to both the rabbit and the plant populations in the ecosystem in the first 6 months and after 5 years.
- Explain the reasons for your predictions.



SCIENCE - PART 3

OPEN-ENDED R

Item: 48

Score: 0

Sample #: 1

48. The rabbits will either be eaten by another animal or they will go out have more baby's. In the first 6 months the rabbit will probably just die. After 5 years the rabbit will have more babies or just die or be eaten.

I already explained my reason.

Score Point: 0

PLEASE DO NOT WRITE IN THIS AREA

310133

60.

0001-00127
02

SECURE MATERIAL - DO NOT

GEPA Science

Item: 48

Score: 0

Sample #: 2

SCIENCE - PART 3

OPEN-ENDED

48.

The population of both the plant and animals will ~~in crease~~ increase over time.

Bird will be in the trees and get good off the trees. When they ~~go~~ fly away they drop the seed then that makes more plants. ^{trees} The rabbits will mate and make more rabbits. This process will keep going and going.

Score Point: 0

PLEASE DO NOT WRITE IN THIS AREA



20969

84.

Score: 0

Sample #: 3

SCIENCE PART 3

OPEN-ENDED RE

48.

I predict that in the first 6 months that they would try to find other food but after 5 years that they would die out. my reasons are because if that's all they eat and they go away what are they going to eat. they would try to find other food.

~~0.1-0000000020~~

06073-12

58.

SCIENCE PART 3

OPEN-ENDED RE

Item: 48

Score: 1

Sample #: 1

48.

- The population of the rabbits would increase while plants decrease. After six months, the change would show but very slightly because not much time has passed. After five years, there will be various problems in the ecosystem. Also since plants are one of the most important food, because it is second on the food web, many of the plant eating animals, or herbivores, will slowly die out. That means the population of the rabbits will increase. The population of the animals that eat the predators of the rabbit will also gradually die out or find new prey. Overall the food web would be destroyed and eventually all animals would die out and there will be no ecosystem.

Score Point: 1

PLEASE DO NOT WRITE IN THIS AREA



405250

87.

SCIENCE - PART 3

OPEN-ENDED RES

Item: 48

Score: 1

Sample #: 2

48.

Since the only predator has been removed, the rabbits are no longer threatened. Over time, the rabbit pop. will steadily increase through reproduction. Because of this, the plants will decrease also. This can be a problem and explains why we must have predators in every environment.

01 0002-00070

00033-72

PLEASE DO NOT WRITE IN THIS AREA

309599

88.

SCIENCE PART 3

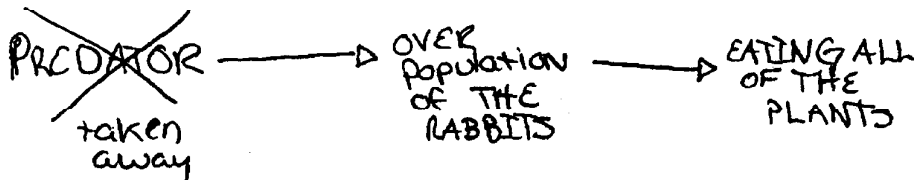
OPEN-ENDED RE

Item: 48

Score: 1

Sample #: 3

48. If the predator of the rabbit population has been removed, there will probably be overcrowding by the rabbits, and then the plants they eat will be extinct. Because without something eating the rabbits, they will keep producing, and that will cause overcrowding. The food will become extinct because all of the rabbits will be eating it.



PLEASE DO NOT WRITE IN THIS AREA

309758

SCIENCE - PART 3

OPEN-ENDED RESPONSE

Item: 48

Score: 2

Sample #: 1

48.

• I think that if the only predator of the rabbit dies out then the rabbit population will swell, and grass will become sparse. Since the predator of the rabbit is gone then the rabbit will keep reproducing and the area will become overpopulated with rabbits. Plus, if the area is filled with rabbits there won't be enough grass to feed them all, and the grass will run out.

00071-12

PLEASE DO NOT WRITE IN THIS AREA

422106

78

SCIENCE - PART 3
OPEN-ENDED RE

Item: 48

Score: 2

Sample #: 2

48.

In the first six months everything will pretty much remain the same because rabbit reproduction either hasn't or has occurred. The only thing is they don't have to hide from anything or anyone just graze all they want with or without their babies.

The next five years will be a complete change. The rabbits will have reproduced five times since the predator has been eliminated causing a major boom in rabbit population. The plant growth that they have been eating will have decreased immensely since the rabbits probably eat faster than the plants can grow.

The reason behind my prediction is that without the predator the rabbits don't have to run and hide and eat just enough to satisfy so as to not be hungry and if noticed by predator hide. The rabbits will not have been killed so more of them eat than before so without the predator major damage will occur.

PLEASE DO NOT WRITE IN THIS AREA

204183

SCIENCE - PART 3

Item: 48

Score: 2

Sample #: 3

OPEN-ENDED RES

48.

If the predator of the Rabbit was taken out of the meadow the rabbit population would increase to thousands. The plant population would decrease a lot because of all the rabbits eating all of them. The reason behind this is because if there is not any predator to keep the population of the rabbits maintained then they are going to keep on reproducing. The Rabbits would keep on eating the plants because that's their food source. The plants would become very scarce.

PLEASE DO NOT WRITE IN THIS AREA

420812

SCIENCE PART 3

Item: 48

Score: 3

Sample #: 1

OPEN ENDED RES

48.

48. In the First six Months that the rabbits have no predators, they will flourish. Then, after five years go by, the plants will be gone and rabbits will begin to die out. Without predators, there will be no one to control the rabbit population from getting out of hand. Since the plants won't be able to produce enough food for all the rabbits, both the plants and rabbits will die out over time.

06067-72

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412528

SCIENCE PART 3

Item: 48

Score: 3

Sample #: 2

OPEN-ENDED RE

48.

During the first 6 months in which the predator of rabbits has been removed, the rabbit population will increase because it is no longer threatened by any organism, while the plant population will decrease because a greater number of rabbits are feeding on it. After five years, the plant population will have severely diminished because of intense feeding by the rabbits. As its food source begins to grow scarce, the rabbit population will also decrease. As they compete for food, the rabbits will be forced to adapt to their changing environment, until eventually only the fastest and healthiest rabbits, those who successfully adapted, will survive.

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104317

SCIENCE - PART 3

Item: 48

Score: 3

Sample #: 3

OPEN-ENDED RES

48. If the predators are gone, the rabbit population will increase rapidly at a very fast rate, and since there is no threat of death, the rabbits will eventually ~~spend~~ ^{spend} more time ~~out~~ out of their burrows. This increase of population growth over 6 months will be very large. The many new young will need food to eat, and they will eventually, over the course of about 2 or 3 years, eat all food there. The rabbits will need more food to support their immense population and probably before 5 years will move to another area and eat what is there, like migrating.

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